

DRAFT
Version 4
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Starting ideas for the Development Process and Content of a New Guidance Document/Strategy on Tribal Ambient Monitoring

MOTIVATION, NATURE, AND PURPOSES OF THE NEW DOCUMENT

Motivation

The Office of Management and Budget (OMB) on a regular basis assesses EPA's Air Program to determine how well each part of the Air Program is managed in terms of having appropriate, and well defined goals; applying resources towards those goals; providing guidance to partners who help meet the goals; having systems in place to observe how well the goals are met; and making adjustments in the program when necessary to reach those goals. In addition to being expected by OMB, this "goals and feedback" paradigm is just good common sense because it helps make sure that limited resources are used in ways that best meet the right goals.

The most recent round of review by OMB has made EPA managers and staff more conscious about the degree to which the tribal assistance portion of the Air Program meets this paradigm and whether EPA headquarters is able to provide documentation to show that it does. One motivation for a new document on tribal air monitoring is to help document that the tribal air monitoring program, possibly with some adjustments if any are found to be needed, does meet this "goals and feedback" paradigm. The proposed new document is not intended to modify any existing EPA policies on tribal air quality management.

EPA's tribal policy emphasizes that as sovereign governments, tribes set their own air program goals. Therefore, EPA's goal for the tribal air program is to help the tribes themselves understand their air quality problems and to establish and meet their air quality goals. **[Julie to insert language to the effect that we do this on a government-to-government basis and in a trust relationship.]**

Tribes are diverse in their air quality problems, challenges, and capabilities. In addition, tribes often also face non-air risks to the health of their members -- as well as other challenges and disadvantages -- that are different from those facing most non-tribal communities. Because of the diversity in situations and goals from tribe to tribe, we have taken the approach of delegating the management of most of the available resources for tribal air management to the Regional Office level where understanding of tribal goals is better, so decisions on funding and in-kind assistance can be made with the best knowledge of the individual situations of the various tribes within a Region. To date, a portion of the available resources have been used to plan, establish, and operate approximately [insert #] ambient air monitoring stations in Indian country and then to use the collected data to assess the air quality situation. This has taken place with little guidance from EPA Headquarters on setting monitoring goals and little technical guidance specific to tribal air monitoring. (In contrast, there is a lot of EPA guidance that applies to state

and local air programs; the difference is in part due to the states' greater homogeneity and the fact that states are subject to statutory requirements while tribes in general are not.) Technical training on the actual operation of monitors is available to tribes through the Tribal Air Monitoring Support Center, but EPA has provided little strategic guidance on where and when monitoring is most needed. One motivation for preparing a new document specific to tribal air monitoring is to help fill any gaps in current technical guidance applicable to tribal situations.

Finally, systems for assessment and reporting what is being accomplished towards meeting tribal goals using tribal air monitoring resources are weak at this time. A result is that people in and outside of EPA who are not personally involved in working with tribes on monitoring projects are likely to be insufficiently aware of what is being accomplished with available resources. Such lack of awareness makes it more difficult to advocate within and outside of EPA for increased resources for tribal air monitoring. One motivation for the new document is to execute and document one cycle of such assessment and reporting, and possibly to lay the foundation for doing this more routinely.

EPA management has requested that the EPA monitoring staff and the tribal air coordinators in Headquarters and the Regional Offices work with interested tribal environmental professionals to create a new document that will address the less-than-satisfactory situation described above and thereby help meet the (draft) purposes given below. The document should be the best that can be completed and conveyed to the Regional Offices and all tribes in final form in April 2006. This date is when the FY2007 Grant and Technical Guidance for the whole Air Program will be issued.

Title and Nature of the Document

The formal title and nature of this document is as yet to be fully defined, and should be defined jointly by Headquarters, Regional Office, the participating tribal professionals. While it is convenient at this point to refer to it as a new "tribal air monitoring strategy," that term ultimately may or may not be the most descriptive.

(Draft) Purposes

The new document should:

- ensure that tribal goals for tribal air monitoring projects are clear and documented before resources under EPA management are applied, that progress in meeting those goals is tracked, and that tracking results are used to make continual improvements, in order to ensure the efficient use of currently available resources and to make the benefits of applying additional resources more certain and evident to those who can influence whether additional resources are made available.

- inform EPA leaders regarding the sufficiency of available resources for tribal air quality management relative to tribal needs and desires. This greater understanding will help inform EPA's decisionmaking on the priority for tribal air management resources in the

development of EPA's annual budget request to Congress and/or in the implementation of the enacted budget.

implement the principles that the tribes are regulatory partners and that EPA's decision-making on tribal matters is usually best placed at the organizational level closest to the affected tribe.

contain information and insights that will be useful to Regional Offices that apply existing criteria to prioritize available funds for tribal air quality management including monitoring, but the goal is not to establish new criteria for funding decisions. The existing guidance on criteria for award of tribal air management funds was issued by Assistant Administrator Jeffrey Holmstead in January 2005.

serve as a useful information resource for tribes as they determine their need for monitoring.

serve as a useful information resource for the tribes as they prepare work plans and formal grant applications and as Regional Offices made decisions on grants, since it will contain commonly accepted principles and terminology for both the grant applicants and the grant reviewers.

offer a one-stop resource for locating background and technical information that is relevant to planning and conducting tribal air monitoring efforts. It should help tribal professionals locate what is useful when they need it.

assist tribes to understand monitoring data.

help integrate and coordinate tribal and state/local/national monitoring strategies and activities.

recognize the need for flexibility to address the unique needs of tribes.

The new document is not intended to resolve the problem of the overall level of EPA funding and in-kind support to tribal air quality management relative to the need for such support.

TIMING

As stated above, the goal is to have the document final by April 2006.

It would be ideal if the first clean draft of the document can be available for presentation and discussion at the October 4-6, 2005 annual meeting of the National Tribal Air Association in Uncasville, Connecticut.

PROPOSED PROCESS FOR DEVELOPMENT

The document will be developed by a work group consisting of OAQPS staff, Regional Office tribal air coordinators who are able to devote their time, and interested tribal air professionals. It is hoped that participants from all three groups stay with the process from beginning to end, rather than have a changing set of participants from meeting to meeting. However, each meeting/call will be open to any interested tribal professional.

Julie McClintock of OAQPS will facilitate the development process and ensure good communication among participants, assisted by other experienced tribal coordination staff in OAQPS including Annabelle Allison, Laura McKelvey, and Sara Terry.

The Ambient Air Monitoring Group in OAQPS will coordinate the writing and editing. Once the outline is agreed upon, volunteer authors for sections of the first draft will be solicited from both EPA and tribal participants.

Regular meetings/calls will be held from now until December. Some calls will involve all participating EPA and tribal staff. Some calls will be for tribal participants with EPA staff included only to the extent needed for purposes of clarifying EPA-provided information or proposals. EPA staff will also work internally with each other on action items and writing assignments as needed in between the meetings/calls with tribal staff.

EPA will put out information about the calls on the Tribal Air call and the tribal list serve.

We will share the first clean draft of the document with a wider group at the NTAA meeting in October and at other Tribal meetings. Consultation steps with tribal leaders will be taken when we have a final draft prepared.

THOUGHTS SO FAR ON THE OUTLINE OF THE NEW DOCUMENT

I. Purpose and Audience

This section would capture the set of purposes listed above, once it is modified and confirmed by subsequent discussions of the work group.

II. Overarching Principles for Tribal Air Monitoring

This section would capture principles that EPA will apply in its air monitoring dealings with tribes. The purpose of listing them in the new document is to promote understanding and observance of the principles by EPA staff, and to help tribes anticipate and understand the basis for future EPA actions. Most principles to be presented will flow from the Clean Air Act, the EPA Indian Policy, the Tribal Air Rule, and other existing law and EPA rules and policies on budget, quality assurance, ambient monitoring, etc. Some principles may be proposed by the workgroup and adopted by EPA during the subsequent consultation with tribal leaders.

The following list illustrates some candidate principles for this section.

- a. EPA has a responsibility to relate to each tribe on a government-to-government basis, and should act in the tribe's best interests where possible.
- b. Input from tribal environmental professionals needs to be early and continuous, including during the development of this guidance/strategy. However, such input does not constitute consultation, which should take place between tribal leaders and their EPA counterparts.
- c. EPA should support tribal capacity building, for example, by helping to develop the capabilities of tribal staff. Contractor support may be necessary and appropriate in some times in some situations, but generally is not the preferred approach to carrying out monitoring. In the area of ambient monitoring, capability includes development of monitoring objectives, development of quality assurance plans, installation and operation of the monitors, execution of quality assurance plans, data handling, and understanding the implications of the observed ambient concentrations. EPA should seek to allow a tribe sufficient support and opportunity to progress through these stages.
- d. EPA has limited resources in its enacted budget to help pay for tribal air quality management in general. EPA is therefore unable to support all monitoring in Indian country that may have value to the affected tribes.
- e. Monitoring supported by EPA grant funds should always be for the identified purpose of characterizing and/or managing specific known or suspected short term and/or long term risks to environmental values that depend on maintaining or restoring good air quality, including:
 - i. Human health risks (including informing exposed persons about the level of their exposure)
 - ii. Ecological risks
 - iii. Cultural resources and values
- f. There needs to be consistency/fairness across tribes, but also flexibility to hear and if appropriate to address unusual or unexpected tribe-specific situations.
- g. Decisions affecting specific tribes should be made at a level where individual situations can be appreciated.
- h. EPA should encourage all parties to take advantage of all available data on ambient air quality where technically relevant. Operating monitors may provide useful information on air quality some distance from their location and information on transport into and out of state and tribal lands.
- i. Tribes should have equal opportunity to participate in programs that are not inherently tied to state/tribe distinctions, and to benefit from resources used to support those programs, where such access is consistent with program goals. For example, EPA's CASTNet monitoring program is intended to monitor acid deposition across broad areas for the purposes of broad national objectives. Operation of CASTNet is funded separately from the state and tribal air grant (STAG) funds. As new sites are contemplated, tribal lands in the right areas of the country to support the monitoring goals should be considered equally with state and federal lands.

- j. Grant procedures and grant performance must comply with applicable laws and regulations.
- k. EPA will work with tribes to ensure that there is timely EPA and public access to data collected with federal funds. EPA will need to explain the significance and need for this access to tribes generally and to each grant recipient. EPA should help tribes understand the significance of their data quickly so tribes are never less aware than others of the data and the data's implications.
- l. There needs to be periodic re-evaluation of the need for and value of ongoing monitoring, for example on a three- to five-year cycle.
- m. This EPA guidance does not limit any tribe's right to monitor for whatever air pollutants it chooses in its own portion of Indian country.
- n. What else?

III. Background for Planning Tribal Air Monitoring

This section will contain background on the Clean Air Act, other relevant laws, regulations, and policies, and other information that is not specifically about tribal air monitoring. It is intended to assist tribal professionals who are not already familiar with this material, so that they can participate more easily and effectively with EPA staff. To save space and time, this section will likely consist of thumbnail sketches and pointers to other documents for fuller descriptions.

- a. EPA's strategic plan under the Government Performance and Results Act, the EPA budget and operating plan, etc.
- b. Relevant CAA provisions, the EPA Indian Policy, the Tribal Air Rule, and the draft document "Implementing the Clean Air Act in Indian Country"
- c. The January 27, 2005 Holmstead memo on criteria for award of tribal air grants
- d. Tribal Environmental Agreements
- e. The existing state/local/other monitoring networks: types, purposes, history, funding
- f. The AMTIC website
- g. The draft National Ambient Air Monitoring Strategy and related rulemaking
- h. QA requirements, example QAPPs, resources for developing QAPPs
- i. Data systems for ambient air measurements (AQS, other)
- j. Availability of ITEP and TAMS support
- k. Availability and role of "benchmarks" for health and ecosystem effects
- l. National Emissions Inventory
- m. National Air Toxics Assessment
- n. Air quality modeling methods and tools, in particular how they may be able to give insight into air quality in Indian country when ambient monitoring is not available.
- o. Indoor air issues including radon and mold
- p. The New Source Review and PSD programs and their relationship to monitoring needs
- q. Clean Air Act section 110(a)(2)(D) – the interstate transport provision that also addresses transport between states and tribes
- r. The GAP program

- s. Visibility provisions of the Clean Air Act, mandatory and non-mandatory Class I areas

IV. Tribal Air Quality Issues and Relevant Ambient Air Monitoring

This section will provide background on ambient air quality issues that can or may exist in Indian country and relevant types of ambient monitoring.

- a. Problems
 - i. pollutants
 - ii. sources
 - iii. tribes as receptors for transport
 - iv. visibility
 - v. special issues, e.g., high intake of specific food types and sources that could be affected by air pollution
- b. Monitoring addressing those problems
 - i. Technologies for air monitoring and other types of related environmental monitoring
 - ii. costs
 - iii. laboratory requirements/options

V. The Role of Tribal Monitoring In the National Monitoring Strategy

- a. Summary/clarification of just what the “national strategy” contains and its status/role
- b. Relationship between the national strategy and tribal monitoring

VI. Understanding Monitoring Data and Its Implications

VII. Storage and Access to Monitoring Data

VIII. Description of Current and Recent Tribal Air Monitoring Activities

- a. History of the initiation and purposes of current monitoring projects
- b. Ambient concentration data from current monitoring projects
- c. Benefit of the data to the tribes which collected the data
- d. Implications/recommendations for near term adjustments in current monitoring projects
- e. Lessons learned that can help guide future projects
 - i. Remaining needs addressable by monitoring
 - ii. Addressing those needs

IX. Assessment of Ambient Air Quality in Indian country in the Absence of Air Monitoring

This section will give tips on how in some situations it is possible to characterize or bound some aspects of tribal air quality when monitoring has not been performed. This is intended to assist tribes which are not able to obtain funding for monitoring and may also help tribes decide whether ambient monitoring is the best use of available resources.

- a. Using very nearby monitors that are off tribal lands. This can be informative for ozone and PM_{2.5} depending on the geographical relationships and features of the situation. Proximity does not always mean representativeness, however.
- b. Larger scale spatial interpolation of data from several non-tribal monitors
- c. Predicting concentrations using air quality models. Meteorology, and estimates of emissions
 - iii. Large scale (grid models)
 - 1. concept
 - 2. how to get this type of modeling done
 - 3. results that are already available from modeling performed by EPA and other organizations
 - iv. Local scale (dispersion/plume models)
 - 1. concept
 - 2. how to get it done
 - 3. results that are already available from modeling performed by EPA and other organizations (e.g., NATA and others)
 - v. Caveats

Estimating upper/lower bounds on concentrations in Indian country based on analogy to non-tribal monitored settings. Tribal lands with similar source patterns as certain urban or rural areas on state land can learn something from monitored concentrations in those urban areas.

How to Request EPA Funding and Other Support

This section may emphasize that it is appropriate for each tribe to request the resources actually needed to accomplish its monitoring goals, to create a more complete record regarding the sufficiency of resources made available.

XI. Getting Started On Complementary Programs

This section, if included, would give encouragement and first steps regarding development of emissions inventories and source reporting, adoption of source emissions standards, adoption and operation of permitting programs, etc.

XII. The Tribal Perspective